

County	PIN	Grant Number	Planning & Monitoring or Implementation?	Grantee	Project Title	Project Description	Total Project Amount	Match Amount	Grant Amount
Contra Costa	24029	12-415-550	P&M	Association of Bay Area Governments	Bay Area Green Infrastructure Master Planning Project	This project will develop a GIS-based screening toolkit that identifies feasible Low Impact Development (LID) sites and prioritizes them based on their potential to reduce stormwater runoff and contaminant loads. The tools will be applied in a number of cities and counties in the Bay Area. Green Infrastructure Master Plans will be developed and conceptual designs will be generated for up to 12 projects.	\$814,901	\$217,000	\$597,901
Santa Barbara	24183	12-416-550	P&M	Santa Barbara County	Implementing the Joint Effort	The project will characterize watershed attributes (landscape and meteorological characteristics) in the central coast, classify receiving waters and analyze linkages between watershed and receiving water characteristics to develop hydromodification control criteria for new and redevelopment.	\$382,600	\$35,600	\$347,000
Statewide	24205	12-417-550	P&M	University Enterprises, Inc. on behalf of CSU, Sacramento	Engineered Soils to Remove Barriers to LID Implementation	The project is a study to develop design guidance and performance information for engineered soils for Low Impact Development implementation. The studies include vegetated mesocosm studies that compare a number of design alternatives, including media type, media depth, media conditioning, underdrain amendment, underdrain elevation, and outlet control. Public outreach will be provided through a select number of workshops/webinars.	\$339,084	\$0	\$339,084
Statewide	23958	12-418-550	P&M	California Stormwater Quality Assoc.	A Web-based Portal for Statewide Coordination of Municipal Stormwater Program Effectiveness Assessment Data and Information	This project will conduct a comprehensive review of municipal stormwater programs throughout the state to identify the breadth and depth of the on-the-ground implementation of Program Effectiveness Assessment (PEAs) by both regulators and municipal stormwater programs.	\$315,650	\$76,400	\$239,250
Stanislaus	24235	12-419-550	P&M	Local Government Commission	Lower Stanislaus Low Impact Development Plan	The project will develop the Lower Stanislaus Low Impact Development (LID) Plan. The Plan will identify "regional" LID projects as part of a comprehensive LID program and will include design and cost estimates of regional LID to support an in-lieu fee program for design, construction, and maintenance of regional LID solutions.	\$349,862	\$35,000	\$314,862
Multiple Counties	24090	12-420-550	P&M	Bay Area Stormwater Mgmt. Agencies Assoc.	Tracking California's Trash	The project will 1) develop, evaluate and recommend monitoring methods to accurately measure trash loads from stormwater conveyances and receiving waters and detect trends over time; 2) fill critical data gaps on the effectiveness and costs/benefits of implementing enhanced street sweeping and stormdrain inlet cleaning as alternatives to trash full capture devices; and 3) provide access to a "My Water Quality" portal with information and recommendations on monitoring methods, BMP costs/benefits, receiving water cleanup data, and a spatial display of successful efforts to reduce trash in California.	\$1,080,000	\$210,000	\$870,000
Statewide	23969	12-421-550	P&M	California Stormwater Quality Association	Removing Barriers to LID in Local and State Codes: Technical Assistance for Municipal Code Updates and Evaluation of the California Building Standards Code (CALGreen)	The Project will provide direct assistance to 25 California municipalities to integrate LID into local regulations for new and redevelopment projects. The Project's five main deliverables include: adoption-ready Code language for 25 municipalities; training for municipal staff who review and approve LID projects; outreach to local government leaders (e.g., elected officials), whose support is crucial for LID Code adoption; publication of case studies and sample LID Code language for the broader California MS4 community; and a white paper with recommendations for updates to the CALGreen Code related to LID.	\$1,121,294	\$125,159	\$996,135
Sacramento	24078	12-422-550	P&M	California Rural Water Association	California Disadvantaged Communities LID/BMP Technical Assistance and Training Project	The project will provide technical assistance and training to 8-15 high-priority Disadvantaged Communities (DACs) needing to reduce storm water contamination of rivers, lakes and streams in their region. The one-on-one training and technical assistance will be in the areas of in Best Management Practices (BMPs) and low-impact development (LID) strategies that will help them comply with established storm water total maximum daily loads (TMDLs).	\$332,748	\$41,666	\$291,082
Los Angeles	24104	12-423-550	P&M	Gateway Water Mgmt. Authority	Los Cerritos Channel Watershed Segmentation and LID Planning Project	The project will use high resolution flow monitoring, constituent monitoring, land use maps and forensic investigations to select sites to implement LID and water harvesting.	\$388,465	\$50,000	\$338,465
Sacramento	24046	12-424-550	P&M	City of Elk Grove	Separating Fact from Fiction: Assessing the Use of Dry Wells as an Integrated LID Tool for Reducing Stormwater Runoff While Protecting Groundwater Quality in Urban Watersheds	The project will install 3 dry wells in various land uses in an urban watershed, monitor stormwater and groundwater quality, and create educational fact sheets and reports to share the results.	\$740,349	\$250,493	\$489,856
Los Angeles	24202	12-425-550	P&M	Council for Watershed Health	Assessing the Effect of Long-term Storm Water Infiltration on Groundwater Quality; Continued Monitoring of the Los Angeles Basin Water Augmentation Study Infiltration BMPs	The project will monitor lysimeters and monitoring wells installed beneath storm water infiltration BMPs at five sites in Southern California.	\$374,675	\$77,800	\$296,875
San Diego	23548	12-426-550	P&M	City of San Diego	LID for Urban Streets: Test of Concept at 43rd St & Logan Ave	The project is a study that examines the effectiveness and practicality of low impact development BMPs. The study will include monitoring over a two year period, with measurements of flow and water chemistry. The study will generate design-specific recommendations which will be made publically available through workshops and web distribution.	\$768,300	\$79,000	\$689,300
Humboldt	23990	12-427-550	P&M	Redwood Community Action Agency	The North Coast Stormwater Coalition's Low Impact Development Pilot Project	The Project is a comprehensive regional LID planning effort for Humboldt and Mendocino Counties and their urban communities. The Project will develop site plans for multiple LID sites in public jurisdictions region-wide, collaborate with businesses and contractors to incentivize use of LID, and conduct in-depth training for many potential LID users.	\$219,450	\$19,950	\$199,500
El Dorado	23994	12-428-550	P&M	Tahoe RCD	Catchment-scale Stormwater Monitoring, Model Validation and Load Estimation to Meet TMDL Requirements in the Lake Tahoe Basin.	This is a catchment-scale stormwater monitoring project. In addition, the grantee will perform data analysis and hydrologic modeling to report baseline pollutant loads for all catchments, and pollutant reductions achieved.	\$836,000	\$76,000	\$760,000

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San Diego	24008	12-429-550	P&M	City of Encinitas	Cottonwood Creek Watershed LID Retrofit Project	The project will consist of a thorough watershed-wide analysis to identify opportunities for both public and private LID retrofit projects. The identified LID retrofit projects will be prioritized based on those projects that achieve the most effective runoff volume and bacteria load reduction. The result of this project will be a comprehensive LID implementation plan for the watershed. A watershed scale outreach and training program will also be developed to educate, promote, and incentivize the use of LID features on residential and commercial properties.	\$269,400	\$26,940	\$242,460
Multiple Counties	24095	12-430-550	P&M	So. Cal. Coastal Water Research Project (SCCWRP)	Development of Numeric Flow Criteria to Support Freshwater Bio-objectives, Hydromodification Management, and Nutrient Numeric Endpoints	The project will develop: 1) a classification system for streams based on environmental flow conditions. 2) a recommended set of flow metrics that are diagnostic of instream biological condition that can be used to establish flow criteria. 3) a set of models/tools that can be used to generate the recommended environmental flow metrics. 4) a series of flow-ecology relationships in terms of species curves or groupings based on functional traits and ecological sensitivities. 5) a set of models that can be used to predict changes in benthic community structure in response to changes in flow metrics. 6) a demonstration of how flow criteria and flow-ecology metrics can be applied in a regulatory (permit) or management setting. 7) recommendations for how the flow-ecology relationships developed by this project can be applied to regulatory or management programs, including bio-objectives, hydromodification management, and nutrient numeric endpoints.	\$1,057,019	\$100,000	\$957,019
Multiple Counties	23912	12-431-550	P&M	Ecology Action of Santa Cruz	Monterey Bay Regional LID Planning & Incentives Program	The project will use targeted GIS mapping to identify the urban areas/parcels with the best opportunity for water quality protection and groundwater recharge; conduct LID opportunities site assessment/potentials study for public rights of way and parcels in those areas; identify 60 public/private commercial sites as LID demo sites using incentives; use demo sites to train civil engineers, design professionals and public agency staff on LID site assessment, design and project costing; develop and implement a regional landscape certification and branding program to support a regional Community Based Social Marketing effort; and demonstrate the feasibility, costs and regulatory pathway for the LID BMP of rainwater to indoor non-potable use.	\$940,425	\$243,255	\$697,170
Statewide	24206	12-432-550	P&M	University Enterprises, Inc. on behalf of CSU, Sacramento	LID Selection and Sizing Tool for Achieving Water Balance in NPDES Phase II Areas	This project will develop a website-based tool that can be used to select and size BMPs to meet water balance requirements. The website will compare various LID BMP size requirements to accomplish pre-development, volume-matching goals based on user-selected site characteristics (imperviousness, rain gauge, soils, etc.), and will reference the CASQA LID portal for maintenance, safety, and cost information. Outreach will be coordinated with programs such as the Central Coast LID Initiative and ASCE webinars.	\$298,947	\$20,000	\$278,947
Alameda	24028	12-435-552	Imp	Alameda County PWA	Alameda County PWA LD Implementation & Demo Project: Parking Lot Stormwater Treatment Improvements	The project will install pervious pavement and permeable pavers, bioretention (rain gardens, biofiltration and green gutters), flow-through and stormwater planters, interceptor trees, and rain barrels. This work also includes the engineering design, native planting, irrigation, monitoring, and installation of interpretive signage and design of educational materials. Roughly half of the existing 92,000 sq. ft. of impervious parking lots will be replaced with pervious surfaces.	\$2,000,000	\$400,000	\$1,600,000
Humboldt	24110	12-436-551	Imp	City of Arcata	Arcata LID Parking Lot Retrofit Project	The project will retrofit up to five conventional parking lots with low impact stormwater designs to infiltrate, retain & treat stormwater runoff to improve water quality & stream hydrology (volume and velocity) in Arcata's most developed watersheds. The project includes a demonstration parking lot in downtown Arcata to educate the greater community by show casing LID's benefits.	\$1,427,575	\$83,604	\$1,343,971
Mendocino	23903	12-437-551	Imp	City of Fort Bragg	Fort Bragg Green Alley Project	The Project will reconstruct and re-grade three existing alleys with Low Impact Development (LID) methods. The alley surfaces will be sloped to direct surface runoff into a center valley gutter that will be constructed of permeable material. Beneath the valley gutter an infiltration trench and perforated pipe will be installed on a layer of sand. The trench will be lined with filter fabric and backfilled with highly permeable material. This will allow water to percolate into native soil, resulting in contaminant removal from the water.such as Alder Creek. The City will also implement an outreach program to educate the public on stormwater treatment using low impact development techniques.	\$677,061	\$33,682	\$643,379
Orange	24007	12-438-559	Imp	City of Laguna Niguel	Oso Creek Multi-Use Trail	The Project will replace existing road pavements with an 8'-10' wide permeable decomposed granite walking/equestrian trail, a 12'-wide off-street bikeway made of pervious asphalt, and 5'8'-wide landscaped infiltration strips planted with native vegetation. Along the centerline of North Forbes Road, the project will also remove an additional 4'-14'-wide strip of existing pavement, and install two landscaped center medians with underlying bioretention BMPs. At the southern project terminus next to the Metrolink Rail Station, the project will remove existing asphalt pavement and install a plaza area constructed of permeable sand-set pavers. Trail access points and crosswalks at Crown Valley Parkway and other side-street intersections will also be enhanced with permeable pavers.	\$1,915,348	\$478,836	\$1,436,512

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San Diego	24063	12-439-559	Imp	City of National City	"A" Avenue Green Street and Pedestrian	A project will retrofit A Avenue in the City of National City to create a green street. The demonstration project would create a major pedestrian pathway out of pervious interlocking concrete pavers that will link Paradise Creek to the Kimball Park main entrance, City Hall, dense downtown residential areas, Historic Brickrow, Morgan Square (a mini park), and the 8th Street Commercial District. Interpretive signs and creek-themed art will teach how urban runoff connects citizens to the creek as it flows through bioretention swales down the street, across the park, and into Paradise Creek.	\$3,300,000	\$800,000	\$2,500,000
Santa Clara	23528	12-440-552	Imp	City of San Jose ESD	Martha Gardens Green Alleys Pilot Project	The project will install approximately 5,000 square feet of porous pavers, underground infiltration trenches and dry wells. The project will replace approximately 35,000 square feet deteriorated asphalt in the alleys with a durable surface of high-albedo "green concrete" that drains to the infiltration devices.	\$1,418,577	\$473,397	\$945,180
Santa Clara	23231	12-441-552	Imp	City of San Jose ESD	Park Avenue: Green Avenue Pilot Project	The project will replace 11,700 square feet of hardscape with permeable surfaces by constructing 4,600 square feet of rain gardens, converting 5,600 square feet of travel lanes and other hardscape to permeable surfaces, and replacing 1,500 square feet of paved median with permeable pavers.	\$1,287,962	\$428,834	\$859,128
Alameda	24136	12-442-552	Imp	City of Union City	South Decoto Green Streets Project (Implementing LID)	The project will install a series of storm water bioretention planters and permeable paving areas to capture, retain, and treat storm water runoff while providing improved drainage. The Project will also install sidewalk bulb-outs, bike lanes, and an increase in street trees.	\$4,000,000	\$1,000,000	\$3,000,000
Santa Barbara	23993	12-443-553	Imp	City of Santa Barbara	LID Stormwater Infiltration Project	This project will remove the impermeable asphalt surface at five sites and replace it with permeable interlocking concrete pavers.	\$2,562,177	\$672,878	\$1,889,299
Los Angeles	24184	12-444-554	Imp	City of Torrance	Machado Lake Trash TMDL	This project will install more than 2,062 catch basin screens, and 2000 no parking signs. The project also includes outreach and education.	\$2,450,450	\$481,600	\$1,968,850
San Luis Obispo	24179	12-445-553	Imp	Coastal San Luis RCD	Stormwater Rewards Rebate Program	The Project will provide a cost-share rebate to individual property owners willing to implement LID Best Management Practice (BMPs). Grant funds will be used to provide technical assistance, BMP design and a rebate incentive to implement LID BMPs. BMPs to be implemented include rain gardens, swales, rain barrels, disconnected downspouts and reductions in driveway/patio impervious surface areas, among others.	\$333,880	\$69,533	\$264,347
Los Angeles	23377	12-446-554	Imp	LA Dept. of Water & Power	Laurel Canyon Blvd. Green Street Project	The Project consists of a series of landscaped infiltration swales within the street right-of-way along 850 feet of Laurel Canyon Blvd. and a dry well located at the intersection of Kagel Canyon Street and Interstate 5.	\$2,390,384	\$390,384	\$2,000,000
Santa Cruz	23402	12-447-550	Imp	Santa Cruz County	Santa Cruz Countywide LID BMPs	The project is a countywide LID implementation effort led by the County of Santa Cruz with an overall goal to restore and protect the water quality of rivers, lakes and streams. A secondary purpose is to foster countywide cooperation in reducing polluted runoff. The project consists of six components, including: an outreach and technical assistance program for the entire County, as well as LID improvements in five locations that will reduce stormwater volumes, improve water quality and recharge groundwater, the primary source of drinking water in this area. All components are located in TMDL/303d listed water bodies.	\$2,972,082	\$712,309	\$2,259,773
Stanislaus	23889	12-448-550	Imp	City of Modesto	Modesto Area 2 Stormwater to Sanitary Sewer Cross Connection Removal Project	The project will reduce stormwater flows to the wastewater treatment plant, the number of Sanitary Sewer Overflows, and improve water quality for Dry Creek, and the Lower Tuolumne River (303d water bodies). Twenty failed dry wells and three sanitary sewer cross connections will be removed. A centralized water quality device will be used to treat stormwater prior to infiltration in a 6.8 acre foot underground retention system. The project renovates the highly utilized park with a new baseball field, multipurpose field, basketball court, and site furnishings.	\$3,157,842	\$157,842	\$3,000,000
San Diego	23951	12-449-550	Imp	City of Vista	Pasea Santa Fe Green Street Project	The project proposes water quality enhancements that will be incorporated into the revitalization of the Paseo Sante Fe Corridor in Vista. Opportunities within the project area include park/open spaces, pedestrian plazas, rights of way, parking areas, and medians. Potential enhancements may include increasing landscaped areas, pervious surfaces, bioretention strips and cells, and others as appropriate.	\$2,912,750	\$1,343,750	\$1,569,000
Los Angeles	23988	12-450-550	Imp	City of Los Angeles	Broadway Neighborhood Stormwater Greenway Project	Three levels of BMPs will be developed; local parcel based Low Impact Development (LID) for 8 acres (60 residential parcels), neighborhood scale LID for 12 acres (3 residential streets and 2 blocks of commercial streets), and a sub-regional scale facility for 30 acres of mixed land uses. The local and neighborhood BMPs will capture and infiltrate all dry-weather flow and up to the ¾ inch storm. The sub-regional BMP will capture up to the 2 inch storm for 30 acres. The sub-regional BMP will also receive dry-weather flows from 228 acres of mixed land uses. Designs will be standardized to promote widespread implementation.	\$3,673,363	\$734,002	\$2,939,361
El Dorado	23955	12-451-550	Imp	City of South Lake Tahoe	Bijou Area Erosion Control Project, Phase 1	The Project proposes to separate relatively clean storm water runoff, generated in the upper portion of the 1300 acre Bijou Creek watershed, from high pollutant load runoff from the Commercial Core. The proposed Project would replace the failing upper watershed drainage culvert, collect runoff from the Commercial Core, pretreat and then pump it to a series of infiltration basins in the upper watershed.	\$7,735,000	\$4,735,000	\$3,000,000
Ventura	24043	12-452-550	Imp	County of Ventura Public Works Agency	County Government Center Parking Lot Green Streets Urban Retrofit	The proposed LID green street infrastructure retrofits would receive, store, treat and infiltrate 100% of the first flush stormwater and non-stormwater runoff from an existing 39 acres of impervious surface serving 3200 parking spaces, using pervious gutters, infiltration basins, drywells and permeable pavement.	\$1,869,068	\$373,774	\$1,495,294

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Sacramento	24048	12-453-550	Imp	City of Citrus Heights	Citrus Heights City Hall Green Parking Lot, Demonstration, and Monitoring Project	The Citrus Heights City Hall Green Parking Lot, Demonstration, Guidelines and Monitoring project will: A.Transform an existing conventional City Hall parking lot into a "green" parking lot and demonstration. The "green" parking lot will include several interrelated LID components including: 1.Remove 1-acre of asphalt and replace with pervious materials 2.Install 900 linear feet of bioswales 3.Install two rain gardens 4.Install 50 native and drought tolerant shade trees 5.Educational Signage about the green parking features B. Develop guidelines for water quality monitoring and testing for mercury and methylmercury in LID applications C. Implement water quality monitoring for three locations in Citrus Heights that incorporate LID principles: 1.Citrus Heights City Hall (current conditions and post-project conditions) 2.Sylvan Neighborhood Center Green Parking Lot 3.Citrus Heights Childrens Center Green Parking Lot	\$1,251,500	\$232,000	\$1,019,500
Orange	24108	12-454-550	Imp	Orange County Public Works	OC Public Works Glassell Yard Campus	The proposed project is to implement LID stormwater retrofit for OC Public Works' 9.4-acre Glassell Yard Campus in the City of Orange, a 1980s era office/warehouse complex consisting of 3 parcels, each with a building and parking lots. Integrated with a planned driveway/parking lot project (the required funding match), the proposal includes construction of permeable paving, flow-through planters, bioswales, modular wetlands, and subsurface cistern to achieve 100% stormwater treatment and 85% stormwater on-site retention.	\$3,705,466	\$786,869	\$2,918,597
Orange	24127	12-455-550	Imp	City of Laguna Woods	City Hall Low Impact Development Retrofit Project	This project will control and mitigate the impacts of storm water runoff through the use of micro-scale LID site control measures. Specifically, this project will include installation of a 1,500 square foot drought tolerant green roof and 2,700 gallon cistern that will capture and reuse storm water runoff for on-site irrigation. A public education and outreach program will be implemented to foster an understanding of the application, feasibility, and cost-effectiveness of LID in public and private retrofit projects.	\$454,282	\$90,856	\$363,426
Los Angeles	24177	12-456-550	Imp	Los Angeles Bureau of Sanitation	Avalon Green Alley South: LID Demonstration Project	The Project proposes the installation of several stormwater best management practices in the subject alley for the infiltration and retention of neighborhood stormwater runoff, thereby reducing and preventing stormwater contamination of the Los Angeles River. The Project will serve as a demonstration for a neighborhood-wide Avalon Green Alley Network, which will provide for integrated stormwater management, pedestrian connectivity, and watershed resource education.	\$1,116,344	\$275,000	\$891,344
Orange	24197	12-457-550	Imp	City of Anaheim	Brookhurst Street South Low Impact Development Project	Construct 3.4 acres of vegetative swales and a permeable pathway to help maintain pre-development hydrology for a major arterial roadway widening project with an average daily traffic count of 30,000 vehicles. The project will be located on remnant right-of-way parcels and includes an innovative education effort involving two neighborhood schools. The project will improve water quality to the 303(d) listed receiving waters and watershed, deemed a high priority watershed by the Regional Water Quality Control Board.	\$1,780,000	\$1,344,000	\$436,000